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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,106	11/09/2001	Daniel K. Schiffer	KCC-15,891	3014
35844	7590	12/08/2006	EXAMINER	
PAULEY PETERSEN & ERICKSON 2800 WEST HIGGINS ROAD HOFFMAN ESTATES, IL 60195			CHOI, PETER Y	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/036,106

**Applicant(s)**

SCHIFFER ET AL.

**Examiner**

Peter Y. Choi

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-26,31,35,37-54 and 56-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-26,31,35,37-54 and 56-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/22/06.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

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## FINAL ACTION

### *Response to Amendment*

1. The rejection of claims 21-26, 31, 35, 37-54, and 56-58 under 35 U.S.C. 103(a) has been withdrawn due to Applicants' amendments. However, further search by the current Examiner due to Applicants' amendments necessitated the new grounds of rejection presented in this Office Action.

### *Claim Rejections - 35 USC § 102/103*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 21-26, 31, 35, 38-40, 48, 49, 53, 54, and 56-58 are rejected under 35 U.S.C. 102(b) as being unpatentable over or, in the alternative, under 35 U.S.C. 103(a) as obvious over USPN 5,171,308 to Gallagher in view of USPN 4,698,372 to Moss.

Regarding claims 21-26, 31, 35, 38-40, 48, 49, 53, 54, and 56-58, Gallagher discloses a breathable outer cover laminate comprising a breathable, stretch-thinned barrier film having one or more layers, one of the layers including a mixture of filler particles and a biodegradable

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thermoplastic polymer, having voids formed around the filler particles, constituting 50-100% of a thickness of the film, each of the layers including a biodegradable thermoplastic polymer, and a fibrous nonwoven web continuously laminated face-to-face with the film and including a biodegradable thermoplastic polymer, the polymer selected from the group consisting of polylactic acid polymers, polyester terpolymers of butanediol, adipic or succinic acid, and terephthalic acid, polycaprolactone polymers and combinations thereof (see entire document including column 3 lines 53-60, column 9 lines 1-5, column 9 lines 44-48, column 9 lines 49-55, column 18 lines 12-13, column 11 lines 49-56, column 7 lines 39-50, column 12 lines 26-55).

In the event it is shown that Gallagher does not disclose the claimed invention with sufficient specificity, the invention is obvious because Gallagher discloses the claimed constituents and discloses that they may be used in combination.

Regarding claims 22 and 23, the film and nonwoven web are adhesively or thermally bonded together (column 8 lines 60-63, column 8 lines 57-60).

Regarding claims 24 and 25, the nonwoven web comprises a spunbonded web or a meltblown web (column 8 lines 45-48, column 8 lines 64-68).

Regarding claim 26, the nonwoven web comprises an air laid web (column 9 lines 35-40).

Regarding claims 31, 35, 57, and 58, a personal care article or medical article comprises the breathable laminate (column 10 line 52 to column 11 line 25).

Regarding claims 38 and 39, the inorganic filler particles comprise calcium carbonate (column 12 lines 26-35).

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Regarding claim 40, the filler particles comprise organic filler particles (Gallagher, column 12 lines 45-48, and Moss, column 5 lines 51-55).

Regarding claims 48 and 49, Gallagher does not appear to teach biaxial stretching of the laminate, although Gallagher does mention forming a nonwoven fabric by stretching (column 9 lines 1-5). However, Gallagher references Moss which discloses a microporous polymeric film having good water vapor transmission rates formed by stretching uniaxially, biaxially or radially (Moss, column 8 lines 40-45).

It would have been obvious to one skilled in the art at the time the invention was made to stretch the laminate uniaxially or biaxially to form an interconnecting network of voids around the filler particles, as taught by Moss, motivated by the desire to stretch the nonwoven fabric to optimize the laminate according to the desired overall porosity and pore size (column 9 lines 15-23).

Regarding claim 54, the biodegradable thermoplastic polymers are selected from the group consisting of polylactic acid polymers, polyester terpolymers of butanediol, adipic or succinic acid and terephthalic acid, polycaprolactone polymers and combinations thereof (see entire document including column 7 lines 39-50).

### ***Claim Rejections - 35 USC § 103***

4. Claims 41, 44-47 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,171,308 to Gallagher in view of USPN 4,698,372 to Moss, as applied to claims 21-26, 31, 35, 38-40, 53, 54, and 56-58, and further in view of USPN 5,955,187 to McCormack.

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Regarding claims 41, 44-47 and 50-52, Gallagher does not appear to teach that the filler particles may comprise water-swellaable filler particles. However, McCormack teaches a breathable microporous film layer used in personal care disposable products or surgical gowns containing filler particles which are water-swellaable natural or synthetic superabsorbent materials and which comprise 10-70% by weight of the film layer (column 5 lines 35-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add water-swellaable filler particles to the laminate in Gallagher in an amount of 10-70 percent by weight, as taught by McCormack, motivated by the desire to customize the fluid stability of the composition in Gallagher with suitable filler particles and motivated by the expectation of successfully practicing the invention of Gallagher.

Regarding claims 51 and 52, a personal care article or medical article comprises the breathable laminate (Gallagher, column 10 line 52 to column 11 line 25, and McCormack, column 2 lines 8-12).

5. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,171,308 to Gallagher in view of USPN 4,698,372 to Moss, as applied to claims 21-26, 31, 35, 38-40, 53, 54, and 56-58, in view of USPN 5,139,687 to Borgher or USPN 5,968,404 to Trinh.

Regarding claims 42 and 43, Gallagher teaches that the disposable composites formed are biodegradable so long as water is present (column 1 line 62 to column 2 line 2).

Additionally, appropriate fillers may be added to enhance disintegratability, particularly finely divided particulates (column 12 lines 26-35). Gallagher does not appear to teach that the filler may be a biodegradable filler comprising a cyclodextrin. However, Borgher teaches the use of

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cyclodextrin, preferably alpha-cyclodextrin, in disposable absorbent products like diapers and catamenial articles (Borgher, column 3 line 65 to column 4 line 65) applied as a spray or as a powder (Borgher, column 25 line 7-20). Trinh teaches the use of alpha-cyclodextrin, which are highly water-soluble (Trinh, column 7 line 46 to column 8 line 53), in the form of a spray of very fine or finely divided particles or droplets (Trinh, column 40 lines 14-19). Additionally, as disclosed in Applicants' specification, cyclodextrin compounds and their derivatives, including alpha cyclodextrin, are inherently biodegradable (paragraph 0030 and 0031).

As it was known in the diaper art to add cyclodextrin compounds to disposable diapers at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the fillers disclosed in Gallagher with the inherently biodegradable cyclodextrin, as taught in Borgher and Trinh, motivated by the desire to use appropriate fillers which enhance disintegratability by being highly water-soluble or biodegradable while being particularly finely divided particulates.

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,171,308 to Gallagher in view of USPN 4,698,372 to Moss, as applied to claims 21-26, 31, 35, 38-40, 48, 49, 53, 54, and 56-58 above, and further in view of USPN 6,028,160 to Chandler.

Regarding claim 37, Gallagher and Moss do not appear to disclose the claimed terpolymers of butanediol, terephthalic acid, and adipic acid. However, functionally equivalent biodegradable polymeric film-forming materials, including the claimed terpolymer, are commercially available as prepared compositions. The Chandler reference discloses a functionally equivalent material, Ecoflex (column 2 lines 54-57), which is a biodegradable film-



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forming composition comprising a terpolymer of butanediol, terephthalic acid, and adipic acid.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use commercially available functional equivalents in practicing that which is taught by Gallagher and Moss. One of ordinary skill in the art would have been motivated by convenience and efficiency provided by a commercially available prepared composition.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 21-26, 31, 35, 37-54, and 56-58 have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.



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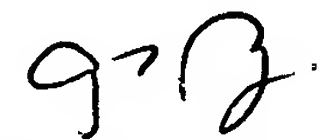
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571) 272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Peter Y. Choi  
December 6, 2006



ANDREW PIZIALI  
PRIMARY EXAMINER